# Proceedings of the New York Entomological Society

(Meetings held in Room 129 of the American Museum of Natural History unless otherwise indicated)

November 3, 1964—Election Day; no meeting.

### MEETING OF NOVEMBER 17, 1964

President Rozen presided; 20 members and 8 guests were present. Dr. and Mrs. A. E. Emerson were introduced. Dr. Emerson has been spending a few days working at the Museum. Mr. Joseph Muller and Mr. Donald Procaccini were unanimously elected to membership. Dr. Henry Taabor was proposed for full membership and Miss Brenda Munz, a student at City College, was proposed for student membership. Dr. Klots showed several slides of interesting arthropods which were seen this fall by his Field Zoology class. Mr. Albert Poelzl passed around a nest of the leaf-cutting bee, Megachile, made in a block of wood with a hole drilled in it and which had been taped to a tree. Dr. Rozen displayed several color photographs sent to him by a Mr. Heaton of Oakland, California. These were of highly magnified butterfly scales and other natural objects, and they were truly remarkable for their extreme resolution and bright colors.

The Diversity of Mite Fauna in the Nasal Passages of Birds and Mammals by Dr. K. E. Hyland of the University of Rhode Island. In an interesting talk illustrated with slides, Dr. Hyland gave many examples of mites living in the nasal passages or related environments in various vertebrate hosts. He discussed their biology and methods of transference.

DAVID C. MILLER, Secretary

### MEETING OF DECEMBER 1, 1964

In the absence of Dr. Rozen, Vice-President Richard Fredrickson called the meeting to order; 16 members and 5 guests were present. Dr. Henry Taabor and Miss Brenda Munz were elected to membership in the Society. Mr. Ronald Schorr, a student at City College, was proposed for student membership. Dr. Edwin Teal showed a book, The Insect World, published by Odyssey, which had many good paintings of insects; he noted a few other books in the same series. Miss Betty White commented that the current exhibition in the Guggenheim Museum contained a mobile of moths.

PROGRAM. Sex-Chromatin and the Production of Males in the Moth Ear Mite by Dr. Asher Treat of the City College. Illustrating his talk with slides, Dr. Treat discussed the life cycle of the mite, indicating preferential occupation of various parts of the moth ear at different times. He discussed the cytology and noted an unusual configuration of chromatin material in cells of embryos that were probably males. This configuration is not easily explained by normal methods of male production, such as parthenogenesis, but may be related to the discovery of "barr bodies," or inactive X chromosomes, in one sex or the other of various species of other animals.

DAVID C. MILLER, Secretary

### MEETING OF DECEMBER 15, 1964

Doctor Rozen presided; 26 members and 16 guests were present. The following guests from Rutgers University were introduced: Doctors A. P. Gupta and W. C. Krueger, Mr. and Mrs. Kenneth Karpel, and Mr. Gary Lipton. Dr. Herbert Ruckes announced that Mr. Ernest L. Bell had died of a heart attack during the past week. Mr. Bell, who worked on the Hesperidae, had been a research associate at the Museum for 30 years (longer than anyone else) and he had donated his collection to the Museum. A motion was passed that the Secretary convey the condolences of the Society to Mr. Bell's family. Dr. Rozen announced that the Bylaws Committee should soon have a revision ready for consideration. He appointed Dr. Ruckes and Mr. Brush to the Auditing Committee. Mr. Ronald Schorr was elected to membership, and Mr. Dennis Ralin, a student at The City College, was proposed for student membership. Dr. Teal called attention to an article in the December 4th issue of **Science**, by Dr. T. Eisner, on the presence of insect repellent oils in catnip. Dr. Rosen passed around a Russian book on the immature stages of soil insects.

PROGRAM. Entomological Odds and Ends by Dr. Alexander B. Klots of The City College. Dr. Klots spoke of his visit to the Entomological Congress in London this past summer, and his examination of the types of some species of moths in the British Museum. He commented on the presumed distastefulness of insects of various types to predators, and on mimicry and polymorphism. He discussed industrial melanism in Britain, and melanism, apparently not caused by industrial darkening, which has been observed in moths of the Eastern United States. It was suggested that this darkening may be due to an increased thickening of the forests, resulting in deeper shade and, thus, a darker environment. His talk was illustrated with slides.

DAVID C. MILLER, Secretary

## MEETING OF JANUARY 5, 1965—The Annual Meeting

President Rozen called the meeting to order; 22 members and 13 guests were present. Some of the guests included: Dr. William Collins, Mrs. H. Ruckes, Mrs. P. Wygodzinsky, and Mr. Christian Irhammar who is a member of the Entomological Society of Lund, Sweden. Dr. Lucy Clausen, Editor of the **Journal**, announced that the 1964 volume contained 256 pages, and that the articles represented a good distribution of subject matter and taxonomic groups. Beginning with the March issue of the 1965 volume our **Journal** will be printed by The Allen Press of Lawrence, Kansas. Dr. H. Ruckes, Chairman of the Auditing Committee reported that the financial records of the Treasurer were in good order, and they were approved by his committee. Dr. Asher Treat, Chairman of the Nominations Committee, presented the list of nominees for 1965. He noted that Mr. J. Huberman was retiring from the office of Treasurer after 10 years of service.

#### Nominations:

President Dr. Jerome G. Rozen, Jr. Vice-President Dr. Richard W. Fredrickson

Secretary Dr. David C. Miller
Assistant Secretary Mr. Albert Poelzl
Treasurer Mr. Raymond Brush
Assistant Treasurer Mrs. Patricia Vaurie

Trustees Mr. Bernard Heineman, Dr. Alexander B. Klots,

Dr. John B. Schmitt, Dr. Pedro Wygodzinsky

Editor Dr. Lucy W. Clausen Associate Editor Dr. James Forbes

Publications Committee Dr. Herbert Ruckes, Dr. David C. Miller

There were no further nominations, and the Secretary was instructed to cast a single ballot for the entire slate of officers as presented. A rising vote of thanks was accorded Mr. Huberman, and the Secretary was asked to write a note of appreciation to Mr. Huberman for his years of devoted service to the Society. Mr. Dennis Ralin was elected to membership, and Mr. and Mrs. Wilton Ivie were proposed for membership. Mr. Ivie is a Research Fellow in the Entomology Department of the Museum and his speciality is spiders. Mr. Jacob Borg was also proposed for membership. Dr. Ruckes read the following memorial to Mr. Ernest L. Bell:

The New York Entomological Society notes with deep regret the passing of

Ernest Layton Bell, Senior, in his eighty-ninth year, on Saturday, December 12, 1964. Long a member of the Society and since 1934 Research Associate in the Department of Entomology of the American Museum, Ernest Bell was known the world over for his work on the family Hesperidae, particularly those species of the New World fauna. He early accumulated a fine collection of these butterflies, generously donated his entire collection to the American Museum and continued to add to it as years went on, until it represented one of the finest and largest accumulations of these insects in the world, being rivaled only by the collection in the British Museum of Natural History. During his long and active career and his continued interest in the Hesperidae, Ernest Bell described a large number of new species; he worked in collaboration with Hayward in South America and Evans of the British Museum; his researches were fundamental and initiated further work by other students here and abroad. In addition to being an ardent lepidopterist, Ernest Bell was also a philatelist of repute and at one time had the most outstanding collection of United States precancelled stamps. In recent years, being somewhat handicapped with arthritic joints in his hands, which prevented him from handling delicate entomological specimens, he turned his attention to coin collection and at his death had a sizable accumulation of rare United States cents.

Dr. Elsie Klots passed around a new book on ants illustrated by Mrs. SuZan Swain. She also showed a flashlight with an insect motif.

PROGRAM. The Fantastic Tree Hoppers by Dr. Herbert Ruckes formerly of The City College and now Research Associate at the Museum. The speaker reviewed the systematics, the life history, and the geographic distribution of the members of the Membracidae. He exhibited some specimens and showed some interesting slides of tree hoppers which emphasized the tremendous variety of odd forms of the pronota in these insects.

DAVID C. MILLER, Secretary

### MEETING OF JANUARY 19, 1965

President Rozen called the meeting to order; 22 members and 14 guests were present. Mr. Thomas A. Brown and his son, Thomas R., were among the guests present. Mr. and Mrs. Wilton Ivie and Mr. Jacob Borg were elected to membership, and the following were proposed, Miss Mary Williamson, Miss Anne Birdsey, and Mr. Richard Applebaum for active membership, and Mr. Arthur Bordes and Mr. George Olish for student membership. Dr. Rozen reported on a meeting of the Executive Committee which had been held prior to the regular meeting. Among various items discussed were the proposed changes in the Bylaws by the Bylaws Revision Committee.

PROGRAM. Entomological Travels in Peru and Brazil by Dr. Pedro Wygodzinsky of the Museum Staff. The speaker took us on an illustrated collecting trip he had made to South America to obtain specimens of the Triatomini, a group of reduviid bugs. The Triatomini, unlike other reduviids, are blood suckers, and their relationship to other members of the family is not clear from their external anatomy. Material was obtained for the study of their internal anatomy and their chromosomes.

DAVID C. MILLER, Secretary

## MEETING OF FEBRUARY 2, 1965

Vice-President Fredrickson presided in the absence of Dr. Rozen; 35 members and 13 guests were present. The persons proposed for membership at the last meeting were elected. They were Miss Mary Williamson, Miss Ann Birdsey, and Mr. Richard Applebaum as active members and Mr. Arthur Bordes and Mr. George Olish as student members. Mr. Cornelius Brown was proposed for membership. Dr. Roman Vishniac displayed a three-volume work

on Diptera written by Panzer in the 18th century. Miss Birdsey showed some insect eggs received on nursery stock by the Brooklyn Botanical Garden. These were identified as belonging to a species of katydid.

PROGRAM. Dr. Richard Fredrickson of The City College spoke on two topics. First, he reviewed briefly information about the flight of birds and insects, particularly the peculiar ability of hummingbirds. He showed an excellent film of bird and insect flight in slow motion made by Mr. Crawford H. Greenewalt. Next, the speaker discussed Loxoscelism which is the effects of the bite of the brown spider, *Loxosceles*. (An abstract of this second topic follows.)

DAVID C. MILLER, Secretary

# Loxoscelism

Loxoscelism refers to the pathological effects of the bite of spiders of the genus Loxosceles (Scytodidae). Many members of this genus are more or less common house spiders, thus, the likelihood that persons can be bitten is increased. Of approximately 50 American species, only L. laeta of South America and L. reclusa of the southern and midwestern United States are definitely known to produce ill effects in man. However, the genus is quite homogeneous in morphology and general biology, and it is suspected that most if not all the species are to some degree potentially dangerous. The usual effect of the bite is cutaneous ("cutaneous arachnidism," "mancha gangrenosa," or gangrenous spot"); an ulcerous necrotic lesion forms around the tiny, primary wound which tends to become gangrenous and requires surgical excision. Occasional systemic effects are observed after the bite of L. laeta which may result in death. A widespread Old World species, L. rufescens, has become established in many places in the world, including isolated areas along the eastern seaboard of the United States. The midwestern L. reclusa shows some evidence of extending its range northward and eastward. Thus, these two last-named species may eventually become pests in the east.

RICHARD W. FREDRICKSON

#### MEETING OF FEBRUARY 16, 1965

In the absence of the President, Vice-President Fredrickson called the meeting to order in Room 319; approximately 50 persons were present. Mr. Y. Srmeli, a Turkish student studying in this country, was introduced as a guest. Mr. Cornelius Brown was elected to membership, and Miss Leah Niederman of The City College staff, and Dr. Elizabeth Shanks were proposed for membership. Miss Leslie Stitt displayed a book with good colored plates of beetles.

PROGRAM. A Naturalist in Eastern and Southern Mexico by Mr. John Pallister of the Museum staff. The speaker described a collecting trip he had made to Mexico and showed a film he had made while on the trip.

DAVID C. MILLER, Secretary

## MEETING OF MARCH 2, 1965

President Rozen presided; 24 members and 2 guests were present. Miss Leah Niederman and Dr. Elizabeth Shanks were elected members, and Dr. John P. Reed of Rutgers University was proposed for membership. Dr. A. B. Klots showed a copy of the publication of the South London Entomological Society which contained a survey of the fauna and flora of Buckingham Palace. He also showed a few moths which he had collected on the Palace grounds during his visit to London last summer. Miss Alice Gray exhibited a specimen of the walking stick *Brunneus* which had laid egg cases. Dr. Roman Vishniac showed a book on birds by Belon, published in 1555, which included the idea of homology of the skeletal elements between birds and man. Dr. Rozen displayed cube-shaped egg cases of a spider. Dr. Asher Treat showed a paper which he had received from a French worker on the hybridization of crickets, and it included the determination of the characteristics of the songs of the hybrids.

PROGRAM. Firefly Flashings and Ozonized Air by Mr. Roscoe Gerke. The speaker talked about the species-specific flash patterns of fireflies, and gave some evidence that it may be stimulated by ozone in the atmosphere. This led to the speculation that ozone might be of value in the treatment of carbon monoxide poisoning.

DAVID C. MILLER, Secretary

### MEETING OF MARCH 16, 1965

Dr. Rozen called the meeting order; 28 members and 13 guests were present. Dr. John Reed was elected to membership, and Mr. Pat Castaldo, a student at The City College, was proposed for student membership. Mr. Robert Buckbee displayed a specimen of *Popilius disjunctus* (Passalidae) which had mites on it. Dr. Lucy Clausen called attention to two articles of interest in the current issue of **Natural History**; one, concerning a milliped which secretes HCN and the other, on the relationship between certain species of insects and fungi. Dr. Roman Vishniac showed a book written by Swammerdam, published in the 17th century, on insect embryology and the classification of insects according to their type of development.

PROGRAM. **Insects Close Up** by Dr. Ray Kriner of Rutgers University. The speaker discussed the general methodology and the equipment used in insect photography and then showed slides of insects while discussing how each was made.

DAVID C. MILLER, Secretary

### MEETING OF APRIL 6, 1965

President Rozen presided; 29 members and 10 guests were present. Mr. Pat Castaldo was elected to student membership. Dr. Vishniac showed an 18th century entomological book by Rosel van Rosenhoff with hand-colored plates. Dr. Rozen announced that Dr. Herbert Ruckes was ill in the hospital. The Secretary was asked to send him a note from the Society expressing our wish for a quick recovery.

PROGRAM. **Student Night.** Miss Alice Gray of the Museum staff introduced three members of the Junior Society. Eddie Tobinick spoke on insect photography. He showed some of his equipment and discussed its uses. David Adler gave notes on the duration of the stages of the life history of the moth *Actias selene*. He mentioned a robber fly which uses closed flowers for protection at night. He spoke of an idea for training predatory wasps to choose pest insects for their prey. Robin Sandow showed colored slides he had taken of the life history of the moth *Actias selene*.

Dr. John Schmitt of Rutgers University then introduced three Entomology graduate students from his department. Mr. William Coniglio spoke on Vitacea polistiformis Harris, the grapevine root borer, which has recently become a pest in New Jersey. He showed slides of the life history and discussed the biology and the control of this moth. He suggested that the recent increase of this insect to problem proportions in New Jersey may be due to the practice in some vineyards of allowing the weeds to grow. Mr. Mark Holman spoke on DDT-resistant houseflies. Resistant flies normally convert DDT to DDE, which is only one-tenth as toxic to them. However, they can not convert o-chloro-DDT and so are not resistant to it. He is trying to develop a strain which will be resistant to o-Cl-DDT, and he is also studying the metabolic products of DDT in the housefly. Mr. Gary Lipton discussed the abdominal nervous system of the honeybee. He showed slides of the nervous system and of the musculature.

DAVID C. MILLER, Secretary

# MEETING OF APRIL 20, 1965

Dr. Rozen called the meeting to order; 18 members and 3 guests were present. Two of the guests were Mr. Camelio of Portugal and Mr. Reynolds of Jamaica who are trainees in the U. S. Dept. of Agriculture inspection program. Mr. John B. Heppner of Santee, California, was proposed for student membership. Dr. Rozen indicated that Dr. Ruckes

is improving nicely and is now able to be up for short periods. Mr. Robert Buckbee displayed a large mantispid and a large hemipteran which he collected on a recent trip to Florida. Miss Alice Gray displayed some items with entomological motifs—a butterfly kite, a bath sponge which looked like a ladybug, and a scarf which was printed with butterflies and butterfly collectors. Mr. Albert Poelzl showed a moth of the family Syntomidae which is a mimic of a wasp.

by a Plant Pathogenic Virus by Karl Maramorosch of the Boyce-Thompson Institute for Plant Research in Yonkers, N. Y. The speaker discussed the leafhopper, Agallia constricta Van Duzee, and a wound tumor virus, which this leafhopper transmits. The virus causes a plant disease in the laboratory but has never been found in nature. Together with co-workers, Dr. Hirumi, Dr. Mitsuhashi, and Dr. Shikata, Dr. Maramorosch is working on rearing the host and infecting it with the virus, on culturing host tissues and infecting them, and on raising aseptic insect and plant hosts to which the virus may be transferred. His slides illustrated the methods used and included electron micrographs of various infected leafhopper tissues. The group is also interested in the method by which the virus multiplies in the insect host.

DAVID C. MILLER, Secretary

# MEETING OF MAY 4, 1965

Vice-President Fredrickson called the meeting to order; 20 members and 4 guests were present. He announced that President Rozen was in Arizona. Mr. John B. Heppner was elected to student membership. Dr. Roman Vishniac showed an 18th century work on invertebrates by Martinus Slabber.

PROGRAM. **The Biology of Parasitic Copepods** by Dr. Robert Shields of The City College. Dr. Shields discussed various members of the primary marine Caligidea, including the genera *Lernaea, Caligus, Lernacera, Lernaeenicus*, most of which are parasitic on fish. He treated the life histories, host specificity, host-induced morphological differences within species, and the general biology of several species. His talk was illustrated with slides.

DAVID C. MILLER, Secretary

## MEETING OF MAY 18, 1965

Dr. Rozen called the meeting to order in the 5th floor lecture room; 28 members and 45 guests were present. Some of the guests were introduced including Dr. Rozen's son, Stephen. Dr. Dennis O'Brian of the Biology Department of Seton Hall University in South Orange, N. J. was proposed for membership. Dr. James Forbes, Associate Editor reporting for the Publications Committee, said that although the first issue of the 1965 volume was only about two-thirds the normal size, the cost had been about one-half that of the 1964 issues. Thus, the change in printers seems to be financially advantageous. Also, although this March issue was a little late in appearing, it is hoped all others will be on schedule. He then gave a brief report of the Conference of Biological Editors, which was held in Philadelphia, Pennsylvania, May 6–7, and at which he represented the Society.

PROGRAM. Predecessors of Insect Photomicroscopy of the 17th Century by Dr. Roman Vishniac of Yeshiva University and the Albert Einstein College of Medicine. The speaker discussed the 17th century as the beginning of modern science, with special reference to microscopy. He illustrated his talk with slides of plates and text from his excellent antique and rare book collection. He then showed a beautiful example of the modern use of the microscope and the camera in part III of his film series, *The Living Tide*, entitled "The Edge of the Sea."

DAVID C. MILLER, Secretary